## bond it



# **MGF ULTRA YIELD**

**High Yield Expanding PU Foam** 

**Technical Data Sheet** 

### PU FOAM & ADHESIVE RANGE

#### Description:

A single-component, fast setting, high yield, multi-purpose PU foam which bonds, fills, seals and insulates most construction materials, which has a reaction to fire rating of class B3 (DIN4102:1).

#### Features & Benefits:

- High yield allows more work with one canister, therefore less waste/ fewer cans used.
- Suitable for use in higher temperatures, up to +40°C.
- Low curing pressure and moderate post expansion avoids deformation of building elements.
- High thermal and acoustic insulation value.
- EMICODE<sup>®</sup> EC 1 Plus very low emission.
- M1 low emission and odour.
- Non-shrinking.
- B3 Rating according to DIN 4102-1.

#### Use

Bond It MGF ULTRA YIELD PU FOAM is a one-component polyurethane assembly foam, and is based on a moisture curing polyurethane prepolymer. The fresh foam adheres to most common building materials including wood, concrete, block, stone, plaster, metal, PVC and polystyrene.

Foam does not shrink after curing keeping the risk of deformation of joints and separation from the surface minimal.

#### Areas of Application:

- Installation of window and door frames and entrance door linings (where a clean and controlled backfill is required).
- Filling of holes.
- Insulation of penetrations.
- Sealing of thermal and acoustic insulation boards.
- Sealing and connection of joints.
- Reducing the impact of thermal bridges.

#### **Properties**

The foam can be used at temperatures from  $-5^{\circ}$ C to  $+40^{\circ}$ C. The can temperature during application should be  $+5^{\circ}$ C to  $+35^{\circ}$ C with the best results at  $+20^{\circ}$ C. It is resistant to temperatures ranging from  $-50^{\circ}$ C to  $+90^{\circ}$ C and to ageing, but not to UV-rays. Noise and heat insulation values are excellent. Chilled cans must be carefully warmed in lukewarm water ( $+30^{\circ}$ C) before usage but avoid heating above  $+50^{\circ}$ C, as there is a risk of bursting. Cans which are too hot, for example after having been left in a vehicle during summer, must be cooled using cold water.

#### Preparation

Surfaces to be bonded must be firm, clean, dry and free from dust, grease or contaminants that may hinder adhesion. They must be moistened well with water. All construction components must be properly prepared prior to foam application. It is advisable to have FOAM CLEANER at hand.

Protect adjacent surfaces with paper, plastic film or other suitable material. The can should be shaken occasionally during this process to obtain the required temperature faster.

Prior to work, and before the adaptor is attached, the can must be shaken thoroughly at least 20 times.

#### Application

As from 24 August 2023 adequate training is required before industrial or professional use.

The instructions for the can must strictly be observed. Use gloves and eye protection and avoid skin contact.

Hold the foam can in upright position with valve up, turn the gun to the can by holding the gun handle with one hand, and turn the can with the other hand. Make sure that the gun is not pointed at other persons when turning it. The can must not be screwed to the gun with the valve upside down or by turning the gun on the can. Care must be taken not to overtighten the adaptor and not to activate the valve during this process. Turn the can upside down and start applying. The foam output can be adjusted by the gun trigger and adjustment screw. When applying foam in layers moisten slightly between each layer.

The fresh foam will expand by 1½ to 2 times. Therefore, care must be taken not to overfill joints. Fresh foam spills must be removed immediately within the tack-free time with Bond It FOAM CLEANER. Cured foam must be removed mechanically

**Please Note:** Moisture is needed for an even and rapid curing of the foam. Inadequate moistening or overfilling of joints and cavities may lead to an unwanted post-expansion of the foam. Foam extrusion can be controlled accurately by varying the pressure on the gun trigger. The valve lever is to be activated carefully. Once a can has been started, it should be used within four weeks.

CLASS DIN 4102-1 B3 EN <u>17333-1</u>

#### Limitations

This foam is not for use around fire doors to provide a fire resistant seal to flames and smoke. Cured foam is sensitive to UV light and direct sunlight and therefore should be covered with suitable opaque sealant, filler, paint or other material. As with all PU foams, it does not bond to polythene, Teflon<sup>®</sup>, siliconised or wax-like surfaces.

#### Cleaning

Excess foam can be removed whilst still wet using Bond It GUN FOAM CLEANER or Bond It MULTI-WIPES. Cured foam can only be removed mechanically.



500ml aerosol canisters.

Colour

Buff.

#### Shelf Life

12 months from date of manufacture when stored according to manufacturers instructions in original unopened containers.

#### **Storage Conditions**

Store and transport upright, in cool, dry conditions between +5 and +30°C. (Considerably higher temperatures may reduce the shelf life). Do not store at temperatuires over +50°C. Keep away from sources of heat and direct sunlight. Protect from frost.

#### **Disposal of Containers**

Do not leave empty containers where residue could be harmful to children, animals or the environment. Replace lids and remove any containers to a central disposal point in accordance with local regulations. Do not pierce can. In the event of spillage remove all sources of ignition, ventilate the area, remove people from confined areas. Material should be mopped up immediately with an inert absorbent material such as sand, collected and placed in a suitable container or allowed to vaporise.

#### **Health & Safety**

Extremely flammable aerosol. USE IN WELL VENTILATED CONDITIONS and ensure all recommended protective equipment is worn during handling & use of this product. Contains an environmentally safe propellant, which complies to the latest EU regulations banning all CFC-propellants. Please refer to separate safety data sheet (SDS) for full handling, use and storage instructions. Keep out of reach of children. It is the user's responsibility to determine suitability for use. If in doubt, contact our Technical Department for advice.

Note: this information is for general guidance only, since site conditions and labour are beyond our control. It is recommended that users make their own tests to determine suitability.







Specification Summary	
Tack-Free (TM 1014)	6-10 minutes
Cutting Time	<30 minutes
Full Cure (Joint 3x5cm @ 23°C)	<8 hours
Cell Structure	Predominantly closed cell
Curing Pressure (TM 1009, moistened surfaces)	<2kPa
Post Expansion (TM 1010)	<80%
Density In Joint (3x10cm; WGM106)	12-16Kg/m <sup>3</sup>
Dimensional Stability (TM 1004)	<2%
Temperature Resistance of Cured Foam	-50°C to +90°C
Working Temperature (Can, application surfaces)	+5°C to +30°C
Working Temperature (Air)	-5°C to +30°C
Reaction To Fire Classification (EN13501-1)	F
Fire Class Of Cured Foam (DIN 4102-1)	B3
Tensile Strength/Elongation (TM 1018, dry surfaces)	>85kPa / 16%
Tensile strength / elongation (TM 1018, moistened surfaces)	>95kPa / 13%
Compressive Strength (TM 1011 moistened surfaces)	>25kPa
Shear Strength (TM 1012 moistened surfaces)	>35kPa
Thermal Conductivity (EN12667, TM 1020)	0.033W/(m K)
Sound Reduction Index Rst,w (EN ISO 10140)	62dB
Water Vapour Permeability (EN 12086)	<0.06 mg/(m h Pa)
Foam Yield In Joint (3x5cm EN 17333-1)	13m / can
Foam Yield (TM 1003) per 500ml can	36L

The values specified were obtained at +23°C and 50% RH, unless otherwise specified. These values may vary depending on environmental factors such as temperature, moisture and type of substrate.

Product / Order Details				
Code	Colour	Size	Barcode	UFI
BDMGF500	Buff	500ml	5056437402141	D0U0-70TV-M00M-UMWW



#### Part of the Bond It PU Foams & Adhesives Range

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expressed or implied, of the fitness or suitability of the products for a

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